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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/626,368

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William E. Slack

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05/15/2006

BAYER MATERIAL SCIENCE LLC  
100 BAYER ROAD  
PITTSBURGH, PA 15205

EXAMINER

PUTTLITZ, KARL J

ART UNIT

PAPER NUMBER

1621

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/626,368	<b>Applicant(s)</b> SLACK ET AL	
	<b>Examiner</b> Karl J. Puttlitz	<b>Art Unit</b> 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 01 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.  
     4a) Of the above claim(s) 6-10 and 16-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 11-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The rejections under section 112, second paragraph are maintained, in part, below.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 and 11-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites that the secondary monoamine may be aliphatic, aromatic or araliphatic. It is unclear if the secondary monoamine must contain these groups.

Applicant argues that, by the claim language, it is clear that the monoamine may be aliphatic, aromatic or araliphatic. However, it is unclear what else the monoamine is by the use of the word "may".

#### ***Prior Art Rejections***

At the onset the Examiner notes that the claims do not explicitly require both a biuret and a secondary monoamine group containing compound. Therefore, the claims

have been interpreted as requiring a) a secondary monoamine group containing compound and b) a toluene diisocyanate, be given the broadest reasonable interpretation. See M.P.E.P. § 2111 ("During patent examination, the pending claims must be "given \*>their< broadest reasonable interpretation consistent with the specification." >*In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).<").

The following are new grounds of rejection:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5 and 11-15 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent No. 3,903,126 to Woerner et al. (Woerner).

The claims cover, inter alia, a stable liquid biuret modified toluene diisocyanate comprising a secondary amine based biuret modified toluene diisocyanate having an NCO group content of 16 to 46% by weight, comprising: (a) a secondary monoamine

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group containing compound which may be aliphatic, aromatic or araliphatic; and (b) toluene diisocyanate having an NCO group content of about 48.3% and comprising: (i) from 0 to 40% by weight of 2,6-toluene diisocyanate, and (ii) from 60 to 100% by weight of 2,4-toluene diisocyanate, wherein the %'s by weight of (b)(i) and (b)(ii) total 100% by weight of (b).

The claims also cover those embodiments further comprising an aliphatic or aromatic alcohol. See claim 11.

Woerner teaches the preparation of biuret-containing polyisocyanates from biuret and , specifically, isomer mixtures of toluene-2,4-diisocyanate and toluene-2,6-diisocyanate. See column 3, lines 30-34. The examiner notes that the use of monoamines is contemplated by the reference, see column 1, line 24, and is therefore within the motivation of those of ordinary skill.

Suitable inert diluents include ethyl glycol. See column 3, line 66.

The foregoing anticipates the rejected claims within the meaning of section 102.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62256893 (JP 893), Chemical Abstract online abstract [retrieved on 11/28/2005] in view of Woerner.

JP 893 teaches lubricating greases that contain reaction products of a mixture of a monamine compound and a diisocyanate. Notwithstanding the fact the abstract does not specifically mention toluene-2,4-diisocyanate and toluene-2,6-diisocyanate, the

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references suggests these compounds with the requisite particularity and guidance by the formula  $\text{OCNR}_2\text{NCO}$ , wherein  $\text{R}_2$  is a divalent aryl.

The difference between JP 893 and the claims is that the reference fails to teach a secondary monoamine. It is for those proposition that the examiner joins Woerner. Specifically, Woerner teaches the use of monoamines, see column 1, line 24, and is therefore within the motivation of those of ordinary skill.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl J. Puttlitz whose telephone number is (571) 272-0645. The examiner can normally be reached on Monday to Friday from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page, can be reached at telephone number (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karl J. Puttlitz  
*Assistant Examiner*

**THURMAN K. PAGE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1600**

*Thurman K. Page*  
*Supervisory Patent Examiner*  
*Art Unit 1621*  
*Technology Center 1600*

571-272-0602